

| L Number | Hits | Search Text  | DB  | Time stamp       |
|----------|------|--|---|------------------|
| 2        | 8    | @ad<=20010113 and 'dielectric layer' and 'hafnium' and 'lanthanum' and 'oxygen' and 'ion bombardment'        | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/24 08:33 |
| 4        | 29   | @ad<=20010113 and 'physical vapor deposition' and 'hafnium' and 'oxygen' and 'ion bombardment'               | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/24 08:39 |
| 7        | 62   | @ad<=20010113 and 'dielectric' and 'physical vapor deposition' and 'ion bombardment' same 'energy'           | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/24 08:40 |
| 8        | 120  | @ad<=20010113 and 'physical vapor deposition' and 'ion bombardment' same 'energy'                            | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/24 08:40 |
| 9        | 14   | @ad<=20010113 and 'hafnium' and 'physical vapor deposition' and 'ion bombardment' same 'energy'              | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/24 08:53 |
| 10       | 2    | @ad<=20010113 and 'lanthanum' and 'physical vapor deposition' and 'ion bombardment' same 'energy'            | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/24 08:41 |
| 11       | 14   | @ad<=20010113 and 'physical vapor deposition' same 'hafnium oxide'   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/24 08:45 |
| 12       | 0    | @ad<=20010113 and 'hafnium' and 'physical vapor deposition' and 'ion bombardment' same 'energy' same '10 eV' | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/24 08:54 |
| 13       | 0    | @ad<=20010113 and 'hafnium' and 'electron beam evaporation' and 'ion bombardment' same '10 eV'               | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/24 08:55 |
| 14       | 4    | @ad<=20010113 and 'hafnium' and 'electron beam evaporation' and 'ion bombardment' and '10 eV'                | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/24 08:59 |
| 15       | 3    | @ad<=20010113 and 'lanthanum' and 'electron beam evaporation' and 'ion bombardment' and '10 eV'              | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/24 09:37 |
| 16       | 0    | @ad<=20010113 and 'lanthanum' and 'hafnium' same 'oxygen redical'  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/24 09:40 |
| 17       | 0    | @ad<=20010113 and 'lanthanum' and 'hafnium' and 'oxygen redical'   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/24 09:40 |
| 18       | 0    | @ad<=20010113 and 'lanthanum' and 'hafnium' same 'oxygen radical'  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/24 09:40 |

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| 19 | 2      | @ad<=20010113 and 'lanthanum' and 'hafnium' and 'oxygen radical'   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/24 09:40 |
| -  | 69     | (438/722).CCLS.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/06/25 14:31 |
| -  | 69     | ((("438/722").CCLS.) and @ad<=20010613   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/23 12:04 |
| -  | 223162 | 438/\$.ccls. or 257/\$.ccls. and @ad<=20010113   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/06/25 16:06 |
| -  | 35716  | (438/\$.ccls. or 257/\$.ccls. and @ad<=20010113) and 'dielectric'  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/02/14 14:15 |
| -  | 4864   | ((438/\$.ccls. or 257/\$.ccls. and @ad<=20010113) and 'dielectric') and 'mosfet'   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/02/14 14:12 |
| -  | 1      | ((438/\$.ccls. or 257/\$.ccls. and @ad<=20010113) and 'dielectric') and 'mosfet') and 'group IV metal'                   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/02/14 14:14 |
| -  | 16571  | (438/\$.ccls. or 257/\$.ccls. and @ad<=20010113) and 'dielectric layer'  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/02/14 14:21 |
| -  | 61     | ((438/\$.ccls. or 257/\$.ccls. and @ad<=20010113) and 'dielectric layer') and 'hafnium' and 'lanthanum'                  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/08/27 16:46 |
| -  | 104    | ((438/\$.ccls. or 257/\$.ccls. and @ad<=20010113) and 'dielectric') and 'hafnium' and 'lanthanum'                        | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/02/14 14:25 |
| -  | 36     | ((438/\$.ccls. or 257/\$.ccls. and @ad<=20010113) and 'dielectric') and 'amorphous oxide'                                | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/02/14 14:26 |
| -  | 1      | ((438/\$.ccls. or 257/\$.ccls. and @ad<=20010113) and 'dielectric') and 'hafnium' and 'lanthanum' and 'amorphous oxides' | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/02/14 14:26 |
| -  | 224025 | 438/\$.ccls. or 257/\$.ccls. and @ad<=20010613   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/06/25 11:50 |
| -  | 15     | (438/\$.ccls. or 257/\$.ccls. and @ad<=20010613) and 'mosfet' and 'dielectric metal oxide'                               | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/02/15 10:49 |

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| - | 4906   | (438/\$.ccls. or 257/\$.ccls. and @ad<=20010613) and 'mosfet' and 'dielectric'                                  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/02/15 10:51 |
| - | 73     | ((438/\$.ccls. or 257/\$.ccls. and @ad<=20010613) and 'mosfet' and 'dielectric') and 'hafnium'                  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/06/25 15:23 |
| - | 24     | ((438/\$.ccls. or 257/\$.ccls. and @ad<=20010613) and 'mosfet' and 'dielectric') and 'hafnium') and 'lanthanum' | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/02/15 10:55 |
| - | 2      | ("6020024").PN.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/02/15 11:22 |
| - | 4      | ("4432035").PN.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/02/15 13:44 |
| - | 417    | (257/411).CCLS.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/02/15 16:09 |
| - | 5      | ("257/411").CCLS.) and 'hafnium' and 'lanthanum'  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/02/15 13:46 |
| - | 230368 | 438/\$.ccls. or 257/\$.ccls. and @ad<=20010613  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/06/25 11:54 |
| - | 168    | (438/\$.ccls. or 257/\$.ccls. and @ad<=20010613 ) and 'hafnium' and 'lanthanum'                                 | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/23 12:14 |
| - | 2      | (438/\$.ccls. or 257/\$.ccls. and @ad<=20010613 ) and 'hafnium' and 'combining' with 'oxygen'                   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/06/25 12:02 |
| - | 91     | (438/\$.ccls. or 257/\$.ccls. and @ad<=20010613 ) and 'hafnium' with 'oxygen'                                   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/06/25 12:07 |
| - | 67     | 'hafnium' with 'reaction' with 'oxygen'   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/06/25 12:32 |
| - | 3      | 'hafnium oxide' near 'formation'  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/06/25 12:33 |
| - | 58     | (438/\$.ccls. or 257/\$.ccls. and @ad<=20010613 ) and 'silicon oxide' and 'hafnium' and 'lanthanum'             | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/06/25 15:42 |

|   |      |   |   |                  |
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| - | 51   | (438/\$.ccls. or 257/\$.ccls. and @ad<=20010613 ) and 'metal' with 'reduces' with 'silicon oxide' | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/06/25 13:42 |
| - | 199  | (438/785).ccls. and @ad<=20010613   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/06/25 14:02 |
| - | 51   | ((438/785).ccls. and @ad<=20010613) and 'Hf'  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/06/25 14:05 |
| - | 32   | ((438/785).ccls. and @ad<=20010613) and 'Hafnium'   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/06/25 14:06 |
| - | 4    | ("4432035").PN.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/06/25 14:32 |
| - | 1    | "2693629".PN.   | USPAT   | 2002/06/25 14:35 |
| - | 1    | "3819990".PN.   | USPAT   | 2002/06/25 14:35 |
| - | 1    | "4062749".PN.   | USPAT   | 2002/06/25 14:38 |
| - | 1    | "4227944".PN.   | USPAT   | 2002/06/25 14:38 |
| - | 1    | "5106827".PN.   | USPAT   | 2002/06/25 15:21 |
| - | 1    | "5106827".PN.   | USPAT   | 2002/06/25 15:21 |
| - | 1    | "5187638".PN.   | USPAT   | 2002/06/25 15:21 |
| - | 1    | "5188902".PN.   | USPAT   | 2002/06/25 15:21 |
| - | 1    | "5273927".PN.   | USPAT   | 2002/06/25 15:22 |
| - | 1    | "6177361".PN.   | USPAT   | 2002/06/25 15:22 |
| - | 1    | "5824590".PN.   | USPAT   | 2002/06/25 15:22 |
| - | 1    | "5773314".PN.   | USPAT   | 2002/06/25 15:22 |
| - | 1    | "5572052".PN.   | USPAT   | 2002/06/25 15:22 |
| - | 90   | ((438/\$.ccls. or 257/\$.ccls. and @ad<=20010613) and 'mosfet' and 'dielectric') and 'hafnium'    | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/06/25 16:05 |
| - | 0    | @ad<=20010613 and 'reduces' with 'silicon dioxide to silicon'                                     | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/06/25 15:44 |
| - | 1028 | @ad<=20010613 and 'reduces' with 'silicon dioxide' with 'silicon'                                 | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/06/25 15:47 |
| - | 29   | @ad<=20010613 and 'reduces' adj 'silicon dioxide' with 'silicon'                                  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/06/25 16:01 |
| - | 4    | @ad<=20010613 and 'hafnium' adj 'silicon dioxide'   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/06/25 15:55 |
| - | 1    | @ad<=20010613 and 'hafnium' adj 'silicon oxide'   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/06/25 15:55 |

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| - | 126214 | 438/\$.ccls. or 257/\$.ccls. and<br>@ad<=20010113 and 'high dielectric'  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/06/25 16:09 |
| - | 124737 | 438/\$.ccls. or 257/\$.ccls. and<br>@ad<=20010113 and 'high dielectric' and<br>'silicon oxide' and 'hafnium'         | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/11 08:52 |
| - | 31     | @ad<=20010113 and 'PVD' with 'ion<br>bombardment'  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/11 11:45 |
| - | 393    | @ad<=20010113 and 'high dielectric' and<br>'physical vapor deposition' or 'PVD' with<br>'ion bombardment'            | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/11 09:01 |
| - | 393    | @ad<=20010113 and 'high dielectric' and<br>'physical vapor deposition' or 'PVD' with<br>'ion bombardment energy'     | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/11 09:04 |
| - | 13419  | @ad<=20010113 and 'high dielectric<br>constant'  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/11 09:08 |
| - | 332    | (@ad<=20010113 and 'high dielectric<br>constant') and 'physical vapor deposition'                                    | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/11 09:09 |
| - | 0      | ((@ad<=20010113 and 'high dielectric<br>constant') and 'physical vapor deposition'<br>) and 'ion bombardment energy' | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/11 09:10 |
| - | 16     | ((@ad<=20010113 and 'high dielectric<br>constant') and 'physical vapor deposition'<br>) and 'ion bombardment'        | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/11 09:10 |
| - | 1      | "4495219".PN.  | USPAT   | 2002/07/11 10:00 |
| - | 1      | "6013553".PN.  | USPAT   | 2002/07/11 10:00 |
| - | 1      | "6015739".PN.  | USPAT   | 2002/07/11 10:00 |
| - | 1      | "5464792".PN.  | USPAT   | 2002/07/11 10:00 |
| - | 1      | "6020024".PN.  | USPAT   | 2002/07/11 10:01 |
| - | 1      | "6020243".PN.  | USPAT   | 2002/07/11 10:01 |
| - | 1      | "6060755".PN.  | USPAT   | 2002/07/11 10:01 |
| - | 1      | "6110784".PN.  | USPAT   | 2002/07/11 10:01 |
| - | 6      | @ad<=20010113 and 'hafnium deposition'   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/11 11:46 |
| - | 22     | @ad<=20010113 and 'hafnium' and 'PVD' and<br>'ion bombardment'   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/11 11:52 |
| - | 3      | @ad<=20010113 and 'hafnium' and 'PVD' and<br>'ion bombardment' and 'ev'  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/11 11:51 |

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| - | 3   | @ad<=20010113 and 'hafnium' and 'sputtering' and 'ion bombardment' with 'eV'           | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/11 13:13 |
| - | 53  | @ad<=20010113 and 'metal' and 'sputtering' and 'ion bombardment' with 'eV'             | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/11 12:56 |
| - | 0   | @ad<=20010113 and 'refractory metal' with 'sputtering' and 'ion bombardment' with 'eV' | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 12:13 |
| - | 1   | "4520413".PN.  | USPAT   | 2002/07/11 13:08 |
| - | 1   | "5930611".PN.  | USPAT   | 2002/07/11 13:08 |
| - | 1   | "6054331".PN.  | USPAT   | 2002/07/11 13:09 |
| - | 1   | "6060391".PN.  | USPAT   | 2002/07/11 13:11 |
| - | 1   | "6069070".PN.  | USPAT   | 2002/07/11 13:12 |
| - | 266 | @ad<=20010113 and 'hafnium' with 'sputtering'  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/11 13:15 |
| - | 22  | @ad<=20010113 and 'hafnium' and 'PVD' and 'ion bombardment'                            | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 12:01 |
| - | 22  | @ad<=20010613 and 'hafnium' and 'PVD' and 'ion bombardment'                            | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 12:09 |
| - | 1   | "4173661".PN.  | USPAT   | 2002/07/23 12:08 |
| - | 1   | "5773363".PN.  | USPAT   | 2002/07/23 12:08 |
| - | 5   | @ad<=20010613 and 'hafnium' and 'PVD' and 'ion bombardment' with 'energy'              | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 13:16 |
| - | 6   | @ad<=20010613 and 'PVD' and 'ion bombardment' with 'eV'                                | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 12:40 |
| - | 3   | @ad<=20010613 and 'hafnium' and 'ion bombardment' with 'eV'                            | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 12:52 |
| - | 29  | @ad<=20010613 and 'PVD' and 'oxygen radical'   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 12:38 |
| - | 67  | @ad<=20010613 and 'sputter' and 'oxygen radical'                                       | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 12:39 |
| - | 19  | @ad<=20010613 and 'hafnium' and 'sputter' with 'eV'                                    | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 12:50 |

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| - | 4   | @ad<=20010613 and 'hafnium' and 'sputter' and 'oxygen radical' with 'eV'                     | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 12:44 |
| - | 0   | @ad<=20010613 and 'hafnium' and 'I-PVD' with 'eV'  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 12:50 |
| - | 6   | @ad<=20010613 and 'hafnium' and 'Ionized' with 'eV'  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 12:50 |
| - | 14  | @ad<=20010613 and 'hafnium' and 'ion bombardment' and 'sputter' and 'eV'                     | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 13:01 |
| - | 912 | @ad<=20010613 and 'dielectric deposition'  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 13:10 |
| - | 118 | ((@ad<=20010613 and 'dielectric deposition') and 'refractory metal')                         | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 13:09 |
| - | 0   | ((@ad<=20010613 and 'dielectric deposition') and 'refractory metal') and 'sputter' with 'eV' | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 13:07 |
| - | 1   | ((@ad<=20010613 and 'dielectric deposition') and 'refractory metal') and 'sputter' and 'eV'  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 13:09 |
| - | 0   | ((@ad<=20010613 and 'dielectric deposition') and 'refractory metal') and 'PVD' and 'eV'      | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 13:09 |
| - | 12  | @ad<=20010613 and 'dielectric deposition') and 'hafnium'                                     | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 13:09 |
| - | 0   | @ad<=20010613 and 'hafnium deposition' and 'PVD' and 'ion bombardment' with 'eV'             | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 13:14 |
| - | 0   | @ad<=20010613 and 'hafnium deposition' and 'sputter' and 'ion bombardment' with 'eV'         | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 13:15 |
| - | 6   | @ad<=20010613 and 'hafnium deposition'   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 13:15 |
| - | 96  | @ad<=20010613 and 'ion bombardment' with 'eV'  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 13:19 |

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|---|-----|---|---|------------------|
| - | 3   | (@ad<=20010613 and 'ion bombardment' with 'ev' ) and 'hafnium'  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 13:20 |
| - | 2   | ("6399521").PN.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/07/23 14:33 |
| - | 78  | ((438/\$.cccls. or 257/\$.cccls. and @ad<=20010113) and 'dielectric layer') and 'hafnium' and 'lanthanum' | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/23 12:15 |
| - | 79  | ((("438/722").CCLS.) and @ad<=20010613  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/23 12:15 |
| - | 229 | ((("438/785").CCLS.) and @ad<=20010613  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/23 12:32 |
| - | 155 | ((("438/635").CCLS.) and @ad<=20010613  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/23 12:07 |
| - | 590 | ((("438/778").CCLS.) and @ad<=20010613  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/23 12:09 |
| - | 369 | ((("438/758").CCLS.) and @ad<=20010613  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/23 12:08 |
| - | 443 | ((("257/410").CCLS.) and @ad<=20010613  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/23 12:09 |
| - | 108 | ((438/\$.cccls. or 257/\$.cccls. and @ad<=20010113) and 'dielectric layer') and 'hafnium' and 'lanthanum' | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/24 08:21 |
| - | 16  | ((("438/785").CCLS.) and @ad<=20010613 and 'hafnium' and 'lanthanum'                                      | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/12/23 12:33 |